

Culberson Solar Array Case Study

“ESA is committed to developing innovative strategies to expand the use of solar power. We are developing numerous large scale multi-megawatts projects throughout North Carolina to facilitate this expansion.”

-Jeffrey Burkett, President



Location: Culberson, North Carolina
Utility: Tennessee Valley Authority
System Size: 999kW
Footprint: 5 acres
Scope of Work: EPC, O&M and Monitoring
Construction Start Date: March 2011
Construction Completion Date: May 2011
Modules: Canadian Solar CS6P-P 235kW
Inverters: Advanced Energy 260kW
Monitoring System: ESA Renewables
Annual output: 1.3 million + kWh

ESA Renewables, LLC (ESA) secured a 10 year Power Purchase Agreement with Tennessee Valley Authority and Blue Ridge Mountain EMC to construct a solar farm in Culberson, North Carolina. Before construction of the 999kW system began, approximately 700 trucks of dirt were brought in to avoid potential erosion issues. The original contour of the land could have negatively affected permitting and the future energy production of the system. ESA worked quickly to level the terrain and maximize the land's potential to produce high returns on investment.

The Culberson installation is expected to generate more than 1.3 million kWh of electricity annually, providing the Culberson community with clean, affordable power. The solar system is situated on one third of a 16 acre property with the remaining acreage in reserve for future solar developments to benefit North Carolina residents.

